This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): An image sensing apparatus comprising:

an image sensing device which generates an image sensing signal by photoelectrically converting light from an object;

~~an extraction~~ a weighting device which ~~extracts a predetermined frequency component from~~ weights a signal component corresponding to a focus detection area in a frame sensed by said image sensing device; and

~~a weighting device which weights the predetermined frequency component extracted by said extraction device;~~

an evaluation value ~~calculation~~ acquiring device which acquires a piece or pieces of information required to control a focusing lens from an output from said weighting device[[;]], ~~and~~

~~a driving device which drives the focusing lens to an in-focus point on the basis of a signal extracted by said evaluation value calculation device~~

wherein said weighting device changes a level of weighting in a second area which is outside of a first area which is placed substantially at a center of the focus detection area.

Claim 2 (Currently Amended): The apparatus according to claim 1, wherein ~~a weighting factor calculated by~~ said weighting device changes ~~in a predetermined number of steps~~ the level of weighting so that the level of weighting increases from a peripheral portion to a central portion of the focus detection area.

Claim 3 (Currently Amended): The apparatus according to claim 2, wherein ~~the weighting factor and the predetermined number of steps can be~~ said weighting device independently ~~set~~ sets the level of weighting in horizontal and vertical directions of the frame.

Claim 4 (Currently Amended): The apparatus according to claim 1, wherein the focus detection area comprises a plurality of focus detection areas, and said weighting device performs relative weighting ~~processing~~ between the adjacent focus detection areas.

Claim 5 (Currently Amended) An autofocus method comprising:

an image sensing step of generating an image sensing signal by photoelectrically converting light from an object;

~~an extraction~~ a weighting step of ~~extracting a predetermined frequency component from~~ weighting a signal component corresponding to a focus detection area in a frame sensed in the image sensing step; and

~~a weighting step of weighting the predetermined frequency component extracted in the extraction step;~~

an evaluation value ~~calculation~~ acquiring step of acquiring a piece or pieces of information required to control a focusing lens from an output in the weighting step[[;]], ~~and~~

~~a driving step of driving a focusing lens to an in-focus point on the basis of a signal extracted in the evaluation value calculation step~~

wherein in the weighting step, a level of weighting is changed in a second area which is outside of a first area which is placed substantially at a center of the focus detection area.

Claim 6 (Currently Amended): The method according to claim 5, wherein ~~a weighting factor calculated~~ in the weighting step, ~~changes in a predetermined number of steps~~ the level of weighting is changed so that the level of weighting increases from a peripheral portion to a central portion of the focus detection area.

Claim 7 (Currently Amended): The method according to claim 6, wherein ~~the weighting factor and the predetermined number of steps can be~~ in the weighting step, the level of weighting is independently set in horizontal and vertical directions of the frame.

Claim 8 (Currently Amended): The method according to claim 5, wherein the focus detection area comprises a plurality of focus detection areas, and in the weighting step, relative weighting ~~processing~~ is performed between the adjacent focus detection areas.

Claim 9 (Currently Amended): A program characterized by causing a computer to execute an autofocus method defined in claim 5.

Claim 10 (Currently Amended): A storage medium characterized by computer-readably storing a program defined in claim 9.

Claim 11 (Currently Amended): An image sensing apparatus comprising:

an image sensing device which generates an image sensing signal by photoelectrically converting light from an object;

~~an extraction~~ a weighting device which ~~extracts a predetermined frequency component from~~ weights a signal component corresponding to a focus detection area in a frame sensed by said image sensing device;

~~a weighting device which weights the predetermined frequency component extracted by said extraction device;~~

an evaluation value ~~calculation~~ acquiring device which acquires a piece or pieces of information required to control a focusing lens from an output from said weighting device; and

a driving device which drives the focusing lens to an in-focus point on the basis of a signal extracted by said evaluation value calculation device,

wherein said weighting device can independently set a level of weighting ~~factors~~ in horizontal and vertical directions.

Claim 12 (Currently Amended): An image sensing apparatus comprising:

an image sensing device which generates an image sensing signal by photoelectrically converting light from an object;

~~an extraction~~ a weighting device which ~~extracts a predetermined frequency component from~~ weights a signal component corresponding to a focus detection area in a frame sensed by said image sensing device;

~~a weighting device which weights the predetermined frequency component extracted by said extraction device;~~

an evaluation value ~~calculation~~ acquiring device which acquires a piece or pieces of information required to control a focusing lens from an output from said weighting device; and

a driving device which drives the focusing lens to an in-focus point on the basis of a signal extracted by said evaluation value calculation device,

wherein said weighting device performs relative weighting processing between adjacent distance measurement frames.

Claim 13 (New): The apparatus according to claim 1, further comprising a driving device which drives a focusing lens to an in-focus point on the basis of a signal acquired by said evaluation value acquiring device.

Claim 14 (New): The method according to claim 5, further comprising a driving stop of driving a focusing lens to an in-focus point on the basis of a signal acquired in the evaluation value acquiring stop.